What is claimed is:

1. A frame structure of a vehicle comprising a flywheel housing, an intermediate housing and a transmission case that are connected to each other along a longitudinal axis of the vehicle to constitute a vehicle frame with an inner space for accommodating a running-power transmission path for transmitting power from an engine to drive wheels via a forward/rearward movement switching unit: wherein

said flywheel housing has a first end connected to the engine and a second open end opposite to said first end along the longitudinal axis of the vehicle; and

said intermediate housing has a hollow shape with a first end and a second end located along the longitudinal axis of the vehicle, said first end having an abutting surface against which said second end of the flywheel housing abuts, a support surface located radially inwardly of said abutting surface so as to support said forward/rearward movement switching unit, and an opening surrounded by said support surface, said opening serving as a first-end opening of said intermediate housing along the longitudinal axis of the vehicle;

wherein said abutting surface and said support surface along the longitudinal axis of the vehicle are located so that at least a portion of the forward/rearward movement switching unit is accommodated within the flywheel housing.

2. A frame structure of a vehicle comprising a flywheel housing, an intermediate housing and a transmission case that are connected to each other along a longitudinal axis of the vehicle to constitute a vehicle frame with an inner

space for accommodating a running-power transmission path for transmitting power from an engine to drive wheels via a forward/rearward movement switching unit; wherein

said flywheel housing has a first abutting surface and a second abutting surface respectively located closer to a first end and a second end of said flywheel housing along the longitudinal axis of the vehicle, said first abutting surface being connected to the engine, said second abutting surface being connected to said intermediate housing and having a first opening through which said forward/rearward movement switching unit can pass, said flywheel housing has a hollow shape with a center axis substantially coaxial with a crank shaft of said engine;

said intermediate housing has a hollow body portion and a flange portion, said hollow body portion having a first end and a second end and extending along the longitudinal axis of the vehicle with a center axis displaced downward from said crank shaft, and said flange portion being located closer to said first end of said hollow body portion, said flange portion having an opening in a radial center thereof, said opening of the flange portion serving as a first-end opening of said intermediate housing along the longitudinal axis of the vehicle;

said flange portion has a radially outward portion radially outwardly extending from an upper part of said body portion and a radially inward portion radially inwardly extending from a lower part of said body portion, so that an abutting surface located opposite to said second abutting surface of said flywheel housing, a support surface located radially inward of said abutting surface so as to support said forward/rearward movement switching unit, and said first-end opening located radially inward of said support surface are defined.

3. A frame structure of a vehicle according to claim 2, wherein said abutting surface and said support surface along the longitudinal axis of the vehicle are located so that at least a portion of the forward/rearward movement switching unit is accommodated within said flywheel housing.

4. A frame structure of a vehicle according to claim 1, wherein:

said forward/rearward movement switching unit includes a reverser housing supported on said support surface and a reverser unit accommodated in said reverser housing;

said reverser housing has a reverser housing body having an end wall that abuts said support surface so as to close the first opening of the intermediate housing and a peripheral wall extending from a peripheral edge of the end wall towards a first side of the vehicle along the longitudinal axis of the vehicle, and a lid for closing a first end of the reverser housing body along the longitudinal axis of the vehicle; and

said reverser housing being arranged so as to seal an inner space of the flywheel housing against the inner space of the intermediate housing in a liquid tight manner.

5. A frame structure of a vehicle according to claim 1, wherein said transmission case accommodates a main-speed change unit of the running-power transmission path, and said intermediate housing has a transmission shaft passing therethrough to connect said forward/rearward movement switching unit to said main-speed change unit.

6. A frame structure of a vehicle according to claim 5, further comprising a

center plate interposed between said intermediate housing and said transmission case so as to bearing-support said transmission shaft.

7. A frame structure of a vehicle extending from a first side to a second side of the vehicle along a longitudinal axis of the vehicle so as to constitute a vehicle frame as providing an inner space, at least a portion of said inner space defining a hydraulic fluid reservoir space; wherein

said hydraulic fluid reservoir space having a partition wall that divides said hydraulic fluid reservoir space into a filter housing portion for accommodating a filter and a main portion other than said filter housing portion, and

said partition wall having a communication port for communication between said filter housing portion and said main portion in a lower region of said hydraulic fluid reservoir space.

8. A frame structure of a vehicle according to claim 7, wherein said partition wall is located so as to have the communication hole located substantially at the center of the hydraulic fluid reservoir space with respect to a vehicle width direction.

9. A frame structure of a vehicle according to claim 7, wherein said partition wall is located so as to have the communication hole located substantially at the center of the hydraulic fluid reservoir space with respect to the longitudinal axis of the vehicle.

10. A frame structure of a vehicle according to claim 7, said frame structure being arranged so that an oil heater can be installed in proximity of said

communication hole.

11. A frame structure of a vehicle according to claim 7, comprising a flywheel housing, an intermediate housing and a transmission case that are connected to each other along the longitudinal axis of the vehicle, wherein a connection portion between said intermediate housing and said transmission case is arranged to enable fluid communication between the inner spaces of said intermediate housing and said transmission case, a connection portion between said intermediate housing and said flywheel housing is arranged to provide fluid tight seal between the inner spaces of said intermediate housing and said flywheel housing, so that said inner spaces of said flywheel housing, said intermediate housing and said transmission case are divided into a space of a dry chamber for accommodating a flywheel and said hydraulic fluid reservoir space.

12. A frame structure of a vehicle according to claim 11, wherein said connection portion between said flywheel housing and said intermediate housing, and said connection portion between said intermediate housing and said transmission case respectively have openings, through which a transmission shaft can pass, and said opening of said connection portion between said flywheel housing and said intermediate housing is closed with a transmission unit that is supported by an adjacent surface of said intermediate housing to said flywheel housing.

13. A frame structure of a vehicle according to claim 11, wherein said transmission case has a bulge that extends in the vehicle width direction as extending from an opening of the first end of the transmission case towards the second end of the transmission case along the longitudinal axis of the vehicle, said

bulge providing a space for said filter housing portion so that a filter can be installed in place by introducing the same from the first side of the longitudinal axis of the vehicle.

14. A brake mechanism for independently or dependently applying brake power to first and second drive shafts on the basis of operation by driver, wherein said first and second drive shafts are connected to right and left wheels in such a manner as to be operable in association with each other, comprising:

first and second brake units for applying brake power respectively to said first and second drive shafts;

a brake operation unit for selectively actuating said first and second brake units independently to each other or dependently to each other on the basis of operation by driver;

said brake operation unit comprising:

a brake operation shaft;

a first actuation member relatively rotatably mounted on said brake operation shaft, said first actuation member being operatively connected to said first brake unit;

a first brake connection member being constructed so as to be connected to a first link mechanism that is operated in association with a first brake operation member that is operable by driver and a common link mechanism that is operated in association with a common brake operation member that is operable by driver, said first brake connection member being also constructed so as to rotate said first actuation member around said brake operation shaft by the operation of any one of said first brake operation member and said common brake operation member by driver;

a common brake connection member being constructed so as to be connected to said common link mechanism and rotate said brake operation shaft around the axis on the basis of operation of said common brake operation member by driver;

a second actuation member relatively non-rotatably mounted on said brake operation shaft, said second actuation member being operatively connected to said second brake unit;

a second brake connection member being constructed so as to be connected to a second link mechanism that is operated in association with a second brake operation member that is operable by driver and rotate said second actuation member around the axis of said brake operation shaft on the basis of operation of said second brake operation member by driver;

said first brake connection member being constructed so as to have a lost motion relationship with one of said first link mechanism and said common link mechanism when said first brake connection member is actuated via another one of said first link mechanism and said common link mechanism;

said common brake connection member being constructed so as to have a lost motion relationship with said common link mechanism when said second brake connection member is actuated via said second link mechanism; and

said second brake connection member being constructed so as to have a lost motion relationship with said second link mechanism when said common brake connection member is actuated via said common link mechanism.

15. A brake mechanism according to claim 14, wherein said first and second brake units are respectively brake actuators that each are rotated according to the rotation of a corresponding one of said first and second actuation members around said brake operation shaft, said brake actuators each being designed to apply brake power to a corresponding one of said first and second drive shafts according to a rotational motion of its own.

16. A brake mechanism according to claim 14, wherein each of said first and second brake units comprising:

a drive-side brake disk axially movable and relatively non-rotatable relative to a corresponding one of said first and second brake shafts;

a fixed-side brake disk axially movable relative to said corresponding one of said first and second brake shafts, said fixed-side brake disk located opposite to said drive-side brake disk;

a brake cover connected to a transmission case so as to cover said drive-side brake disk and said fixed-side brake disk, said transmission case supporting said first and second drive shafts;

a brake actuator rotatably located between a group of said drive-side brake disk and said fixed-side brake disk, and an inner circumference of said brake cover, said brake actuator being designed to press said drive-side brake disk and said fixed-side brake disk into frictional engagement with each other according to a rotational motion of its own;

a stop member located opposite to said brake actuator, with said group of the drive-side brake disk and the fixed-side brake disk therebetween, so as to define a limit of the axial motions of said drive-side and fixed-side brake disks;

said stop member having a center hole for bearing-support of the

corresponding drive shaft and any one of a hole and a cutout for bearing-support of the corresponding operation member, said stop member being secured to any one of said transmission case and the corresponding brake cover; and

said operation member being straddle-mounted by both the corresponding brake cover and the corresponding stop member.

17. A brake mechanism according to claim 16, wherein said fixed-side brake disks of said first and second brake units each have a center hole located at the radial center thereof, through which a corresponding one of said drive shafts pass, and any one of a recess or protrusion for fitting engagement with the corresponding operation member, said fixed-side brake disks each are non-rotatably secured in position by the corresponding operation member.

18. A brake mechanism according to claim 16, wherein in each of said first and second brake units;

cam balls are provided between the brake actuator and the brake cover;

one of the adjacent surfaces of the brake actuator and the brake cover has holding recesses and another one of the adjacent surfaces has tapered grooves so that said cam balls are respectively engaged into holding recesses and said tapered grooves;

said tapered grooves each have a deepest portion and a tapered portion that gradually decreases in depth as it advances from the deepest portion in the circumferential direction;

said operation member has a tubular portion mounted on the brake operation shaft and a cam portion radially outwardly extending from said tubular portion; and

said brake actuator has a cam follower portion that is engaged with the cam portion of said operation member.

19. A brake mechanism according to claim 16, wherein:

said first brake connection member has a tubular body relatively non-rotatably mounted on said first actuation member and a connection portion radially outwardly extending from said tubular body;

said common brake connection member has a tubular body relatively non-rotatably mounted on said brake operation shaft and a connection portion radially outwardly extending from said tubular body;

said connection portion of the first brake connection member has a first brake groove extending throughout a predetermined length in the circumferential direction with reference to said brake operation shaft so that said first link mechanism is engaged into said first brake groove, and a common brake groove extending throughout a predetermined length in the circumferential direction with reference to said brake operation shaft so that said common link mechanism is engaged into said common brake groove of the first brake connection member;

said connection portion of the common brake connection member has a common brake groove extending throughout a predetermined length in the circumferential direction with reference to said brake operation shaft so that said common link mechanism is engaged into said common brake groove of the common brake connection member;

said common brake grooves of said first brake connection member and said common brake connection member are formed in the same position with respect to the circumferential direction with the axis of the brake operation shaft as a reference; and

said first brake groove of said first brake connection member is displaced from said common brake grooves with respect to the circumferential direction.

20. A brake mechanism according to claim 19, wherein:

said second brake connection member has a tubular body relatively non-rotatably mounted on said second actuation member and a connection portion radially outwardly extending from said tubular body;

said connection portion of the second brake connection member has a second brake groove extending throughout a predetermined length in the circumferential direction with reference to said brake operation shaft so that said second link mechanism is engaged into said second brake groove; and

said second brake groove is formed in the same position as the first brake groove with respect to the circumferential direction with the axis of the brake operation shaft as a reference.

21. A brake mechanism according to claim 14, wherein said pair of drive shafts are a pair of differential yoke shafts mounted in a differential gear unit in a running-power transmission path extending from said power source to drive wheels.